LISTING OF CLAIMS

1. (Previously Presented) A method for adjusting a transmission rate of a wireless communication system comprising a transmitter and a receiver, the method comprising:

transmitting a plurality of transmitted packets at the transmission rate by the transmitter;

receiving a plurality of received packets corresponding to the transmitted packets by the receiver;

determining a state parameter according to at least a characteristic determined by the transmitted packets and the received packets; and

adjusting the transmission rate according to the state parameter,

wherein the characteristic is determined according to a number of the transmitted packets and a number of the received packets,

wherein the state parameter is a ratio determined by dividing the number of the received packets with the number of the transmitted packets.

2-3. (Canceled)

4. (Original) The method of claim 1 wherein the characteristic is determined according to the signal strength of the received packets.

5. (Original) The method of claim 4 wherein the state parameter is a value corresponding to the signal strength of the received packets.

6. (Original) The method of claim 1 wherein the adjusting step is performed according to a comparison result of the state parameter and at least a threshold value.

7. (Original) The method of claim 6 wherein the adjusting step further comprises increasing the transmission rate if the state parameter is larger than a first threshold.

8. (Original) The method of claim 6 wherein the adjusting step further comprises decreasing the transmission rate if the state parameter is smaller than a second threshold.

9. (Original) The method of claim 1, further comprising the step of determining whether to use a RTSICTS mechanism according to the state parameter.

10. (Previously Presented) The method of claim I wherein the characteristic is determined according to a number of times of transmitting the transmitted packets.

11. (Previously Presented) A method for adjusting a transmission rate of a wireless communication system comprising a transmitter and a receiver, the method comprising:

transmitting a plurality of first transmitted packets at a first transmission rate and a plurality of second transmitted packets at a second transmission rate by the transmitter;

receiving a plurality of first received packets corresponding to the first transmitted packets and a plurality of second received packets corresponding to the second transmitted packets by the receiver;

determining a first -state parameter according to at least one first characteristic determined by the first transmitted packets and the first received packets;

determining a second state parameter according to at least one second characteristic determined by the second transmitted packets and the second received packets; and

adjusting at least one of the first and the second transmission rates according to at least one of the first and the second state parameters,

wherein the first characteristic is determined by a number of the first received packets and a number of the first transmitted packets,

wherein the first state parameter is a ratio determined by dividing a number of the first received packets with a number of the first transmitted packets.

12. (Original) The method of claim 11 wherein the adjusting step is performed according to a comparison result of the first state parameter and a first threshold.

13. (Original) The method of claim 12 wherein the adjusting step further comprises increasing at least one of the first and the second transmission rates if the first state parameter is larger than the first threshold.

14. (Original) The method of claim 11 wherein the adjusting step is performed according to a comparison result of the second state parameter and a second threshold.

15. (Original) The method of claim 14 wherein the adjusting step further comprises decreasing at least one of the first and the second transmission rates if the second state parameter is smaller than the second threshold.

16-17. (Canceled)

18. (Previously Presented) The method of claim 11, wherein the second state parameter is a ratio determined by dividing a number of the second received packets with a number of the second transmitted packets.

19. (Previously Presented) The method of claim 11 wherein at least one of the first and the second characteristic is determined according to the signal strength of at least one of the first and the second received packets.

20. (Original) The method of claim 11, further comprising the step of determining whether to use a RTSICTS mechanism according to at least one of the first and the second state parameters.

21. (Original) The method of claim 11 wherein the first transmitted packets and the second transmitted packets are transmitted by turns.

22. (Previously Presented) The method of claim 11 wherein at least one of the first and the second characteristic is determined according to at least one of the number of time of transmitting the first and the second transmitted packets.

23-26. (Canceled)

27. (Previously presented): A method for adjusting a transmission rate of a wireless communication system comprising a transmitter and a receiver, the method comprising:

counting a number of transmitted packets within a predetermined time interval, the transmitted packets being transmitted by the transmitter under the transmission rate;

counting a number of acknowledgement packets received by the receiver, each of the acknowledgement packets representing a successful transmission of one of the transmitted packets;

judging whether a relationship between the number of transmitted packets and the number of acknowledgement packets satisfies an predetermined criterion;

judging whether the transmission rate reaches a maximum or a minimum transmission rate;

increasing the transmission rate when the relationship satisfies the predetermined criterion and the transmission rate does not reach the maximum transmission rate; and

decreasing the transmission rate when the relationship does not satisfies the predetermined criterion and the transmission does not reach the minimum transmission rate.

28. (Previously presented): A method for adjusting a transmission rate of a wireless communication system comprising a transmitter and a receiver, the method comprising:

counting a number of first transmitted packets within a predetermined time interval, the first transmitted packets being transmitted by the transmitter under a first transmission rate;

counting a number of first acknowledgement packets received by the receiver, each of the first acknowledgement packets representing a successful transmission of one of the first transmitted packets;

counting a number of second transmitted packets within the predetermined time interval, the second transmitted packets being transmitted by the transmitter under a second transmission rate, the second transmission rate being lower than the first transmission rate;

counting a number of second acknowledgement packets received by the receiver, each of the second acknowledgement packets representing a successful transmission of one of the second transmitted packets;

judging whether a first relationship between the number of first transmitted packets and the number of first acknowledgement packets satisfies an increment criterion;

judging whether the first transmission rate reaches a maximum transmission rate;

increasing the first transmission rate when the first relationship satisfies the increment criterion and the first transmission rate does not reach the maximum transmission rate;

judging whether a second relationship between the number of second transmitted packets and the number of second acknowledgement packets satisfies a decrement criterion;

judging whether the second transmission rate reaches a minimum transmission rate; and

decreasing the second transmission rate when the second relationship satisfies the decrement criterion and the second transmission rate does not reach the minimum transmission rate.

29. (Previously presented): A method for adjusting a transmission rate of a wireless communication system comprising a transmitter and a receiver, the method comprising:

counting a number of first transmitted packets within a predetermined time interval, the first transmitted packets being transmitted by the transmitter under a first transmission rate;

counting a number of first acknowledgement packets received by the receiver, each of the first acknowledgement packets representing a successful transmission of one of the first transmitted packets;

counting a number of second transmitted packets within the predetermined time interval, the second transmitted packets being transmitted by the transmitter under a second transmission rate, the second transmission rate being lower than the first transmission rate;

counting a number of second acknowledgement packets received by the receiver, each of the second acknowledgement packets representing a successful transmission of one of the second transmitted packets;

calculating a first relationship between the number of first transmitted packets and the number of first acknowledgement packets, and a second relationship between the number of second transmitted packets and the number of second acknowledgement packets

judging whether the first transmission rate reaches a maximum transmission rate;

judging whether the second transmission rate reaches a minimum transmission rate;

comparing the first relationship with the second relationship and thereby generating a result;

increasing the first transmission rate when the result satisfies an increment criterion and the first transmission rate does not reach the maximum transmission rate; and

decreasing the second transmission rate when the result satisfies a decrement criterion and the second transmission rate does not reach the minimum transmission rate.